WHAT IS CLAIMED IS

1. A device for scanning a document, comprising:

a photoelectric conversion unit which scans a document, and supplies image data of the scanned document;

a background detecting unit which detects a background level of the image data;

an image processing unit which applies one or more types of image processing to the image data, and applies image processing identical to said one or more types of image processing to the detected background level; and

a background removal unit which removes background noise from the image data having undergone said image processing according to a threshold that is derived from the background level having undergone said image processing.

2. The device as claimed in claim 1, wherein said one or more types of image processing includes γ conversion.

3. The device as claimed in claim 2, wherein the γ conversion is performed at an end of said one or more types of image processing.

4. The device as claimed in claim 1, wherein said one or more types of image processing includes MTF correction.

5. The device as claimed in claim 1, wherein said one or more types of image processing includes a filtering process.

6. The device as claimed in claim 1, wherein said image processing unit applies said one or more types of image processing to the image data and the detected background level through one and same operation.

7. The device as claimed in claim 6, further comprising a combining unit which includes the detected background level into the image data as part of the image data prior to the image processing by said image processing unit.

8. The device as claimed in claim 7, wherein said combining unit generates a gate signal indicative of a position of the detected background level included in the image data, said device further comprising a background data extracting unit which extracts the detected background level from the image data in response to the gate signal.

9. The device as claimed in claim 7, wherein said one or more types of image processing includes a filtering process, and said combining unit includes the detected background level into the image data at a position of a blank period of the image data.

10. The device as claimed in claim 7, wherein said one or more types of image processing includes a filtering process, and said combining unit includes the detected background level into the image data at a position of a valid data period of the image data such that the included detected background level has a data size larger than a filter size of said filtering process.

11. The device as claimed in claim 1, further comprising a printer unit which prints an image on a paper sheet according to the image data from which the background noise is removed by said background removal unit.

12. An apparatus for scanning a document, comprising:

a memory unit which stores therein scanned image data;

an input unit which receives a user instruction as to whether to perform background noise removal on the scanned image data; and

a background removal unit which removes background noise from the scanned image data stored in said memory unit in response to the instruction indicative of performing of the background noise removal, and refrains from removing background noise from the scanned image data stored in said memory unit in response to the instruction indicative of non-performing of the background noise removal.

13. The apparatus as claimed in claim 12, further comprising a controller which connects said memory unit to an external network so as to allow access to be made from the external network to the scanned image data stored in said memory unit.

14. A method of processing image data, comprising:

a background detecting step of detecting a background level of image data of a scanned document;

an image processing step of applying one or more types of image processing to the image data, and applying image processing identical to said one or more types of image processing to the detected background level; and

a background removal step of removing background noise from the image data having undergone said image processing according to a threshold that is derived from the background level having undergone said image processing.

15. The method as claimed in claim 14, wherein said one or more types of image processing includes γ conversion.

16. The method as claimed in claim 14, wherein the γ conversion is performed at an end of said one or more types of image processing at said image processing step.

17. The method as claimed in claim 14, wherein said one or more types of image processing includes MTF correction.

18. The method as claimed in claim 14, wherein said one or more types of image processing includes a filtering process.

19. The method as claimed in claim 14, wherein said image processing step applies said one or more types of image processing to the image data and the

detected background level through one and same operation.

20. The method as claimed in claim 19, further comprising a combining step of including the detected background level into the image data as part of the image data prior to the image processing by said image processing step.

21. The method as claimed in claim 20, further comprising:

a gate signal generating step of generating a gate signal indicative of a position of the detected background level included in the image data; and

a background data extracting step of extracting the detected background level from the image data in response to the gate signal.

22. The method as claimed in claim 20, wherein said one or more types of image processing includes a filtering process, and said combining step includes the detected background level into the image data at a position of a blank period of the image data.

23. The method as claimed in claim 20, wherein said one or more types of image processing includes a filtering process, and said combining step includes the detected background level into the image data at a position of a valid data period of the image data such that the included detected background level has a data size larger than a filter size of said filtering process.

24. A method of scanning a document, comprising:

a storing step of storing scanned image data in memory;

an accepting step of accepting a user

instruction as to whether to perform background noise removal on the scanned image data; and

a selecting and background noise removal step of removing background noise from the scanned image data stored in said memory in response to the instruction indicative of performing of the background noise removal, and refraining from removing background noise from the scanned image data stored in said memory in response to the instruction indicative of non-performing of the background noise removal.

25. The method as claimed in claim 24, further comprising a step of allowing access to be made from an external network to the scanned image data stored in said memory.

26. A device for scanning a document, comprising:

scanning means for scanning a document, and

for supplying image data of the scanned document;

background detecting means for detecting a background level of the image data;

image processing means for applying one or more types of image processing to the image data, and for applying image processing identical to said one or more types of image processing to the detected background level; and

background removal means for removing background noise from the image data having undergone said image processing according to a threshold that is derived from the background level having undergone said image processing.

27. A device for scanning a document, comprising:

a background detecting unit which detects a background level of image data of a scanned document;

a threshold generating unit which generates a threshold based on the detected background level;

a clipping unit which clips to the threshold the image data above the threshold;

an image processing unit which applies one or more types of image processing to the clipped image data and the threshold; and

a background removal unit which removes background noise from the clipped image data having undergone said image processing according to the threshold having undergone said image processing.

28. The device as claimed in claim 27, further comprising a combining unit that includes the threshold into the clipped image data as part of the clipped image data prior to the image processing by said image processing unit.

29. The device as claimed in claim 28, wherein said one or more types of image processing includes a filtering process, and said combining unit includes the threshold into the clipped image data at a position of a valid data period of the clipped image data such that

the included threshold has a data size larger than a filter size of said filtering process.

30. A device for scanning a document, comprising:

background detecting means for detecting a background level of image data of a scanned document;

threshold generating means for generating a threshold based on the detected background level;

clipping means for clipping to the threshold the image data above the threshold;

image processing means for applying one or more types of image processing to the clipped image data and the threshold; and

background removal means for removing background noise from the clipped image data having undergone said image processing according to the threshold having undergone said image processing.